First record of *Ellimenistes laesicollis* (Coleoptera: Curculionidae) as a garden pest in the Western Cape, South Africa

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Ellimenistes laesicollis Fåhraeus (Coleoptera: Curculionidae: Entiminae: Embrithini) is a rather small (4–5 mm long), grey weevil (Fig. 1) that was described in 1871 from material collected by A.J.A. Wahlberg during his visit to southern Africa (1838–1845). It remained unnoticed for many years until Keetch (1973) recorded it as a pest of arabica coffee (*Coffea arabica*) in KwaZulu-Natal (KZN) and called it the grey coffee snout beetle. The adult beetles were found to feed on the peduncle (stalk) of young coffee fruit which abort as a result, causing yield losses of up to 40 %. The beetles also eat the soft succulent suckers, which snap. They eat cavities into green berries and into the stalk of more mature fruit, causing the fruit to fall, and damage flowers and leaves. They mainly attack young and newly planted coffee, but can also damage mature trees (Keetch *et al*. 1974; Annecke & Moran 1982). Keetch (1973) found it on various other plants such as *Bidens pilosa* (blackjack), watergrass (*Cyperus* sp.), *Grevillea robusta* (silky oak) and sugarcane; he mentions that it is apparently of no economic significance on sugarcane. Schoeman (2001), however, called it the sugar cane snout beetle and mentioned that he had observed it feeding on the epidermis of banana in the Eshowe region, KZN, where it led to severe downgrading of the fruit. Schoeman (2009, 2015) recorded it as a pest of macadamia. In 2007 and 2008 he observed substantial damage on recently planted macadamia trees in the Stanger (now KwaDukuza) region of KZN and large infestations on mature trees in the Empangeni area of the same province. He also observed it in 2008 on macadamia in the Chipinge area of eastern Zimbabwe. It is also listed as a defoliator pest during the establishment of wattle and eucalypt seedlings (Govender 2002, 2007) and as a pest of tea (Annecke & Moran 1982).

These records show that the insect has only been known as a pest of commercial crops in the eastern regions of South Africa and northwards into eastern Zimbabwe. Distribution data of specimens in the South African National Collection of Insects (ARC-Plant Protection Research Institute, Pretoria), confirm this distribution with specimens from several localities in KZN. In addition to specimens from KZN, the Iziko South African Museum, Cape Town, has specimens from Maputo, Mozambique, and Lydenburg (now Mashishing), Mpumalanga Province (the latter is probably a misidentification as Mashishing is far from low altitude, eastern coastal habitats where the beetle is typically found). However, it has no identified specimens from the Western Cape Province.

Fig. 1. Adult of *Ellimenistes laesicollis*.

The author first noticed the species in a Stellenbosch, Western Cape, garden in 2009, upon which specimens were submitted to the National Collection for identification. It was established that the oldest specimens from the Western Cape in the National Collection were collected by the author

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at Kenridge, a northern suburb of Cape Town, during 1980–1984, while there are specimens in the collection from Rosebank, a southern suburb, (in 1984) and Bloubergstrand (in 1987).

The presence of this beetle in Western Cape gardens therefore seems to be a relatively recent phenomenon and it joins a number of other insects that have in recent years moved into the south-western Cape, either through migration or accidental transfer of infested material (see Giliomee 2000; Perissinotto *et al*. 2011; Picker & Krüger 2013; Giliomee 2014). Since *E. laesicollis* is wingless, it probably arrived with infested material.

The beetle has since its first appearance become annually very common in the Stellenbosch garden and has been observed to damage a variety of home garden plants, including beans, spinach, michaelmas daisies (*Symphyotrichum* sp.), lilies (*Lilium* sp.), spur flower (*Plectranthus*) and *Dahlia* flower heads. Pictures of the beetle and comments on the internet site iSpot indicate that it is a common and sometimes severe pest in some gardens in the Cape Peninsula, attacking a wide variety of plants such as vegetables, creepers and other ornamentals, hence the name 'gardenbane weevil' used on iSpot (http://www.ispotnature.org/search/node/gardenbane%20weevil).

It appears that, in contrast to the eastern and northern areas of the country, where *E. laesicollis* is damaging to commercial agricultural crops, it is so far only a garden pest in the Western Cape. In view of its polyphagous nature and the experience in home gardens, one could expect it eventually to become a pest of commercial vegetable and flower production in this region. They did not feed on green and ripe grape berries as well as young vine leaves offered to them in captivity, grapevines being the mayor agricultural crop of the region.

In gardens, damage is caused by nibbling of the adults on the leaf surface, but particularly leaf margins (Fig. 2), as is typical of some other snout beetles, like the banded fruit weevil *Phlyctinus callosus* Shoenherr, also common in Cape gardens (pers. obs.). This damage is not severe, unless numbers are high. In addition, *E. laesicollis* likes to feed on the young stems of lily (*Lilium* sp.) plants, scarring them and causing them to break (Fig. 3), often just below the flower bud; in a bed of lilies about 10 % lost their flowers (pers. obs.). During the day they are mostly sedentary on leaves and stems or inside flowers, such as *Dahlia,* dropping down when disturbed. At night they actively walk around and feed.

Very little is known of the life history of *E. laesicollis*. Seasonally the adults make their first appearance in spring (first noticed at Stellenbosch on 25 and 15 September in 2014 and 2015, respectively), are abundant over the summer months, and still present in low numbers until the beginning of April. This corresponds with the observations of Keetch *et al*. (1974) in KZN where the adults were found on coffee trees from September to June. In captivity,

Fig. 2. Adult *Ellimenistes laesicollis* feeding on the edge of a lily leaf.

Fig. 3. Feeding by adult *Ellimenistes laesicollis* on lilies results in scars (left stem) or snapped stems (right stem).

elongated, shiny-white eggs were laid which turned pitch-black after a day; eggs were laid singly in the soil or in small clusters of up to 14 eggs, attached to plant debris or soil particles. The young larvae that hatched from these eggs were C-shaped, apodous and with a light brown head, as is typical for curculionid larvae.

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